



U.S. DEPARTMENT OF  
**ENERGY**

# **Bridging Partnerships Small Business Symposium**

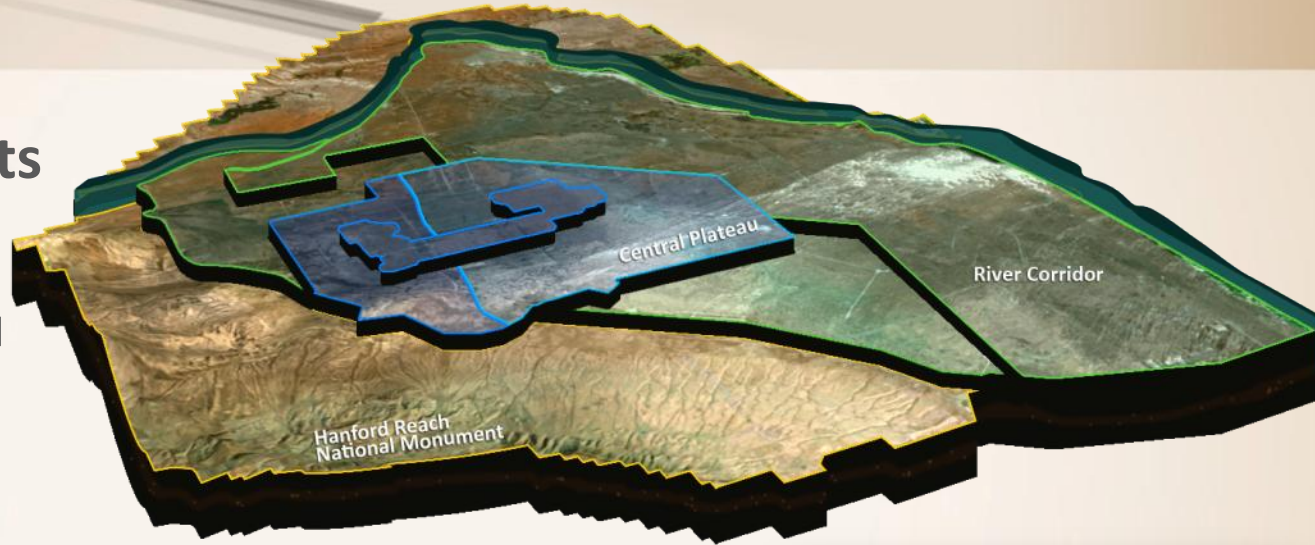
**Matt McCormick – Richland Operations Office Manager**  
**Stacy Charboneau – Office of River Protection Deputy Manager**

*April 2012*

# Hanford Cleanup Overview

## Three Components

- River Corridor
- Central Plateau
- Tank Waste



## Two DOE Offices

- Richland Operations Office
- Office of River Protection



# Workforce/Economics

- 10,300 total DOE and contractor employees
- Hanford Budget is about \$2.2 billion per year
- Budget outlook
  - Continued need for cleanup at current funding levels for the foreseeable future
  - Cleanup mission continues to 2050 - 2060
- Richland Operations Office, the Office River Protection and our prime contractors reported \$815 million of small business awards in fiscal year 2011
- Outlook for fiscal year 2012 small business awards will be similar

# Hanford Cleanup Scope



2015 2020 2030 2040 2050

## River Corridor

- Remediating Waste Sites
- Demolishing Facilities
- "Cocooning" Reactors
- Groundwater Remedies in Place

## Central Plateau Inner Area

- Remediating Waste Sites
- Demolishing Facilities
- Plutonium Finishing Plant
- Groundwater Remedies in Place

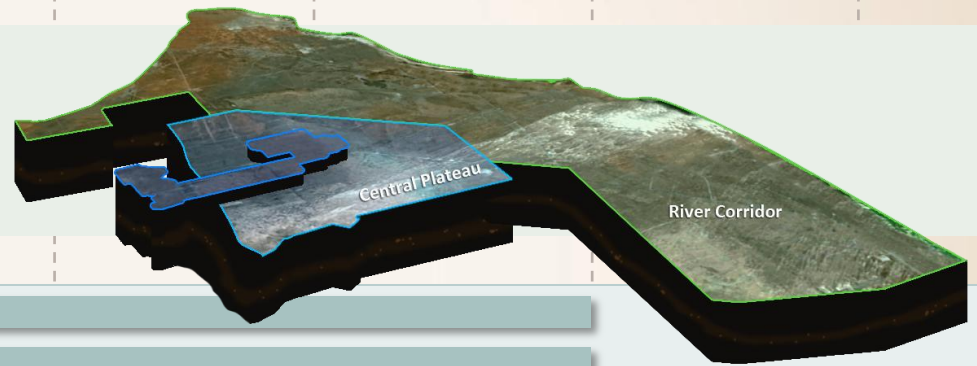
## Tank Waste

- Waste Retrieval, Waste Feed Delivery, and Tank Closure
- Waste Treatment Plant Construction and operations

## Footprint Reduction






Shrink from 586 square miles to ~10 square miles

## Long-term Stewardship





# Hanford Prime Contracts

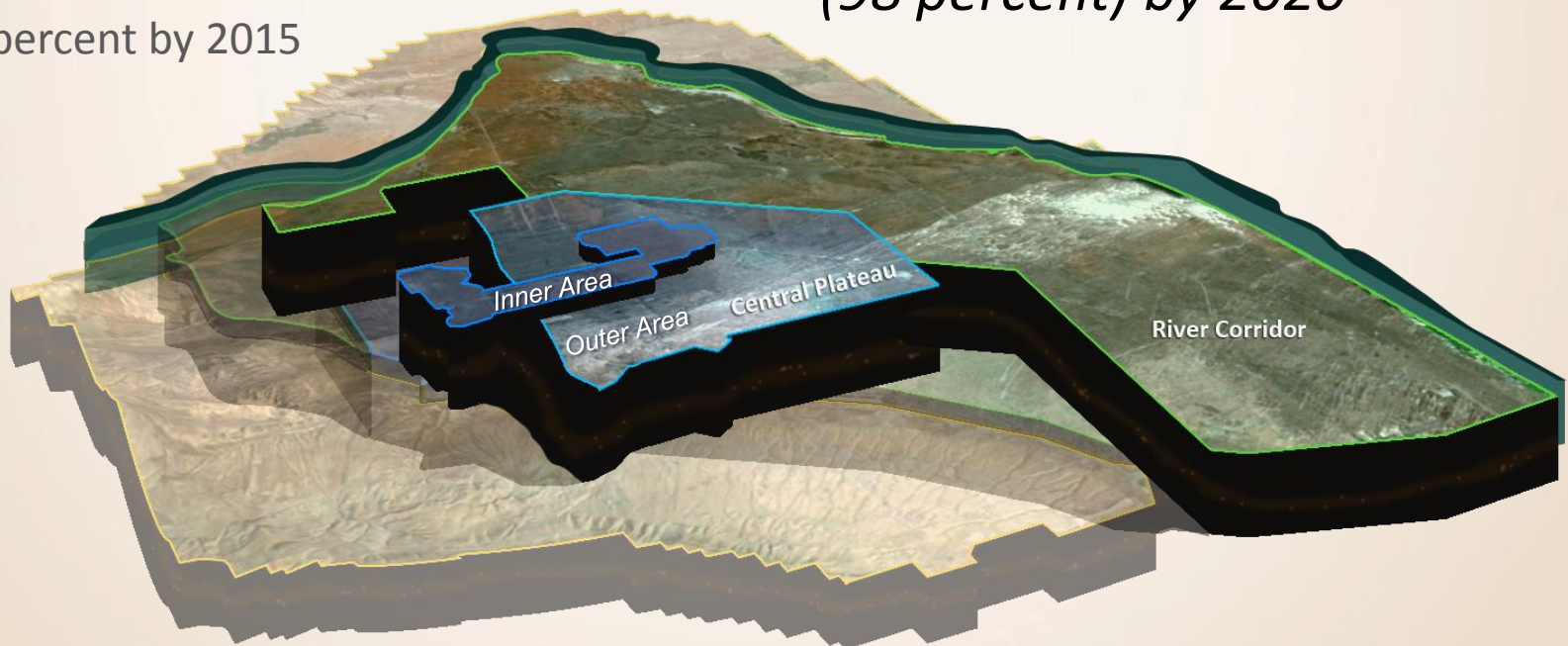
 <b>River Corridor Closure RCC</b>	 <b>CH2MHILL</b> Plateau Remediation Company <b>Plateau Remediation Contract PRC</b>	 <b>Mission Support Contract MSC</b>	 <b>Bechtel National Inc. BNI</b>	 <b>Washington River Protection Solutions WRPS</b>
Facility demolition, waste site remediation, operation of disposal facility	Facility and waste site cleanup, groundwater remediation, and waste disposal	Cost-effective infrastructure and site services to support the cleanup mission	Design, Construction, and Commissioning of the Waste Treatment Plant	Monitor, manage 177 underground storage tanks; prepare for and provide waste to the Waste Treatment Plant
Awarded in 2005 for 10 years Cost: \$2.3 Billion Subcontracting Goal: At least 65 percent of work	Awarded in 2008 for 5 years, with 5 option years Cost: \$5.1 Billion Subcontracting Goal: 49.3 percent	Awarded in 2008 for 5 years, with 5 option years Cost: \$3 Billion Subcontracting Goal: 50 percent	Current Total Estimated Contract Price is: \$11.2B Subcontracting Goal: 40.4 percent	Awarded in 2008 for 5 years, with 5 option years Cost: \$6.8 Billion Subcontracting Goal: 58.2 percent

# DOE Vision – Shrinking the Cleanup Footprint

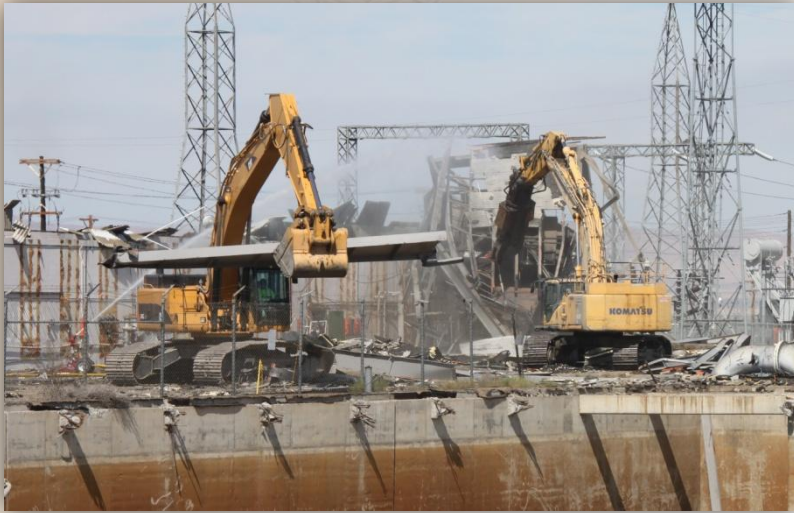
## Footprint reduction goals:

- 49 percent in 2011
  - 66 percent complete to date
- 70 percent by 2012
- 90 percent by 2015

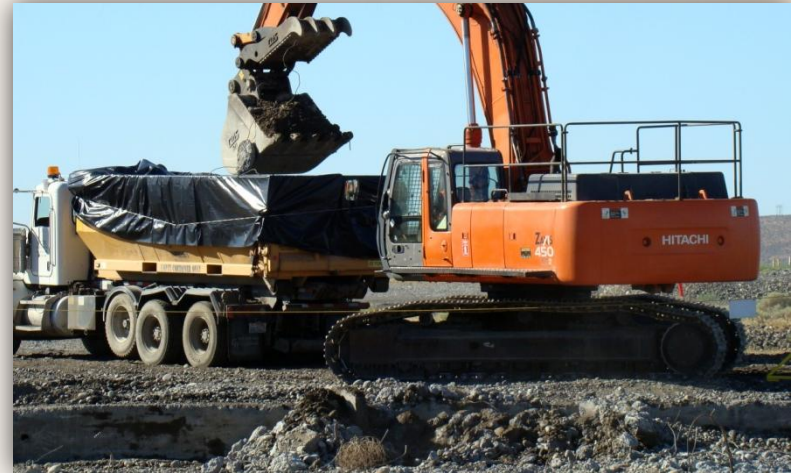
*Shrink to the extent practical  
from 586 square miles to  
about 10 square miles  
(98 percent) by 2020*



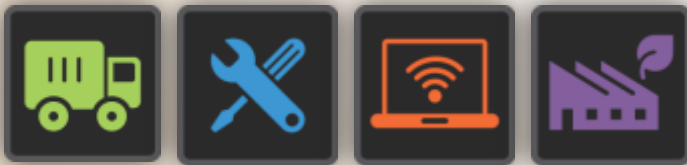
# Scope of Work: Richland Operations Office Contractors



*Deactivate, decontaminate, decommission and demolish facilities*



*Retrieve, treat, ship, dispose of contaminated soil and waste*



*Maintain Hanford Site infrastructure and find operating efficiencies*



*Monitor and treat groundwater*

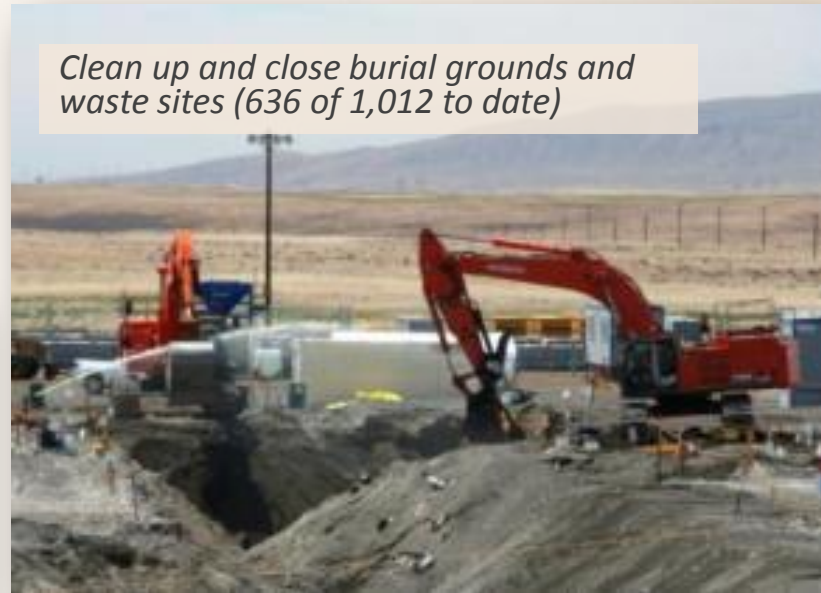


# River Corridor Work Scope

*Deactivate, decontaminate,  
decommission and demolish  
facilities (310 of 471 to date)*



*Clean up and close burial grounds and  
waste sites (636 of 1,012 to date)*



*Treat, transport and dispose of waste  
debris at Hanford's disposal facility  
(12.5 million tons disposed to date)*





# River Corridor Work Scope

*N Reactor*



## Place Reactors in Interim Safe Storage

- 5 completed to date
- 1 nearly complete (N Reactor), 1 underway (K East Reactor), 1 remaining (K West)
- B Reactor: National Historic Landmark



*K East Reactor*



# Central Plateau Project Scope



## Facility, Waste Site and Canyon Remediation

Remediate 5 processing canyons, over 900 facilities and more than 800 waste sites





# Central Plateau Work Scope



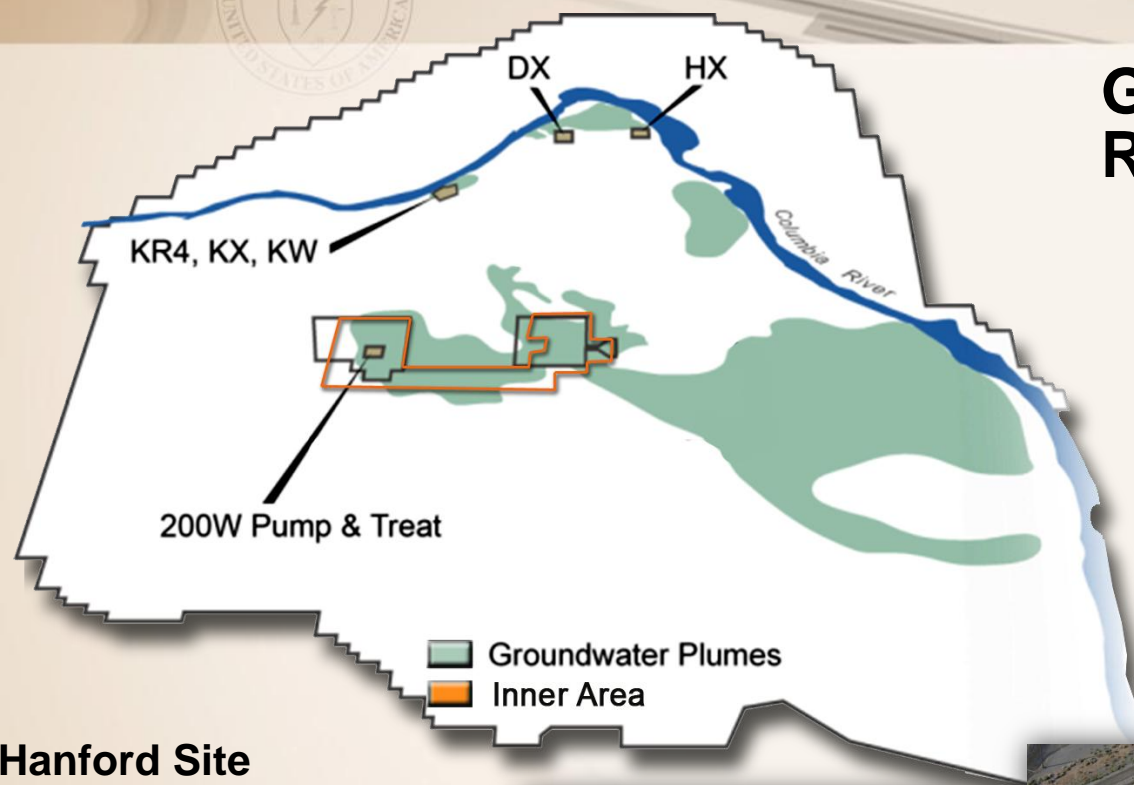
## Treatment and Disposal of Waste

- Over 15,000 legacy containers of radioactive waste
- Retrieve over 5,400 cubic meters of transuranic waste
- Treat over 130 million gallons of liquid waste annually
- Manage 2,300 metric tons of spent nuclear fuel
- Manage interim storage of 1,936 cesium and strontium capsules





# Central Plateau Work Scope



## Groundwater Remediation

- Address 12 plumes with 10 major contaminants, encompassing approximately 65 square miles
- Operate treatment facilities to remove contamination



# Scope of Work: Office of River Protection Contractors



*Manage and monitor the 177 underground storage tanks containing 56 million gallons of radioactive and chemical waste*



*Retrieve and provide waste to the Waste Treatment Plant*



*Design, construct and commission the Waste Treatment Plant to immobilize the tank waste*



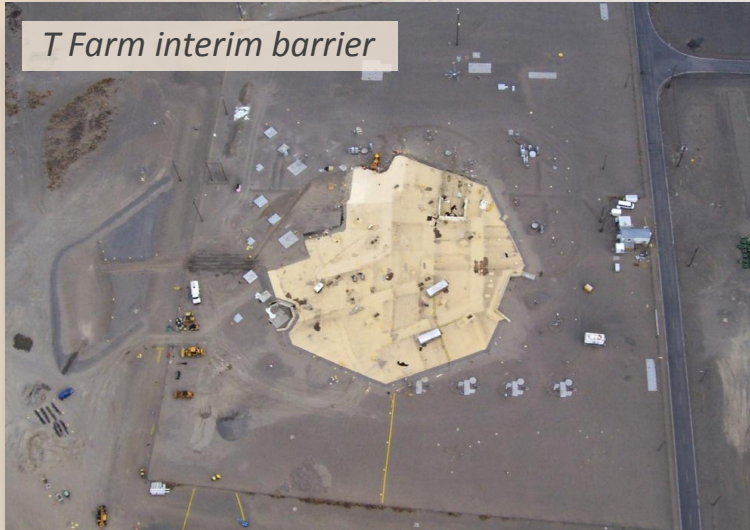
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Richland  
Operations Office



# Tank Farms Work Scope

*T Farm interim barrier*



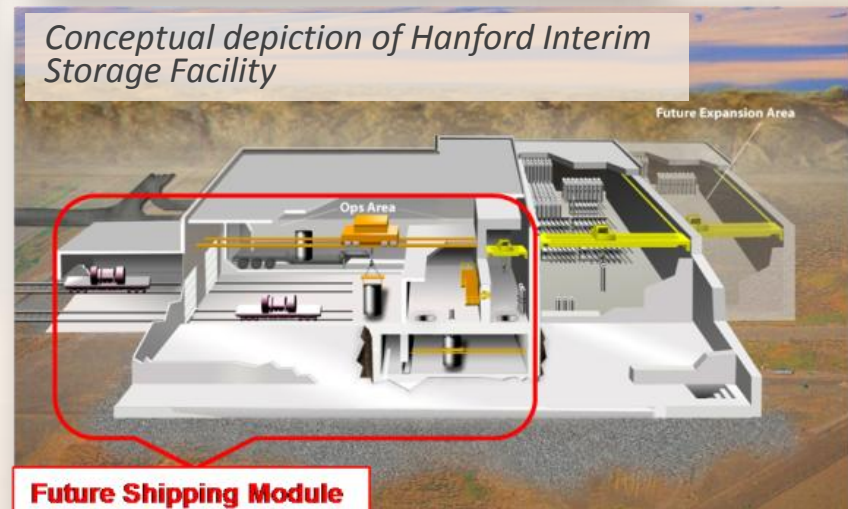
*C Farm after start of retrievals*





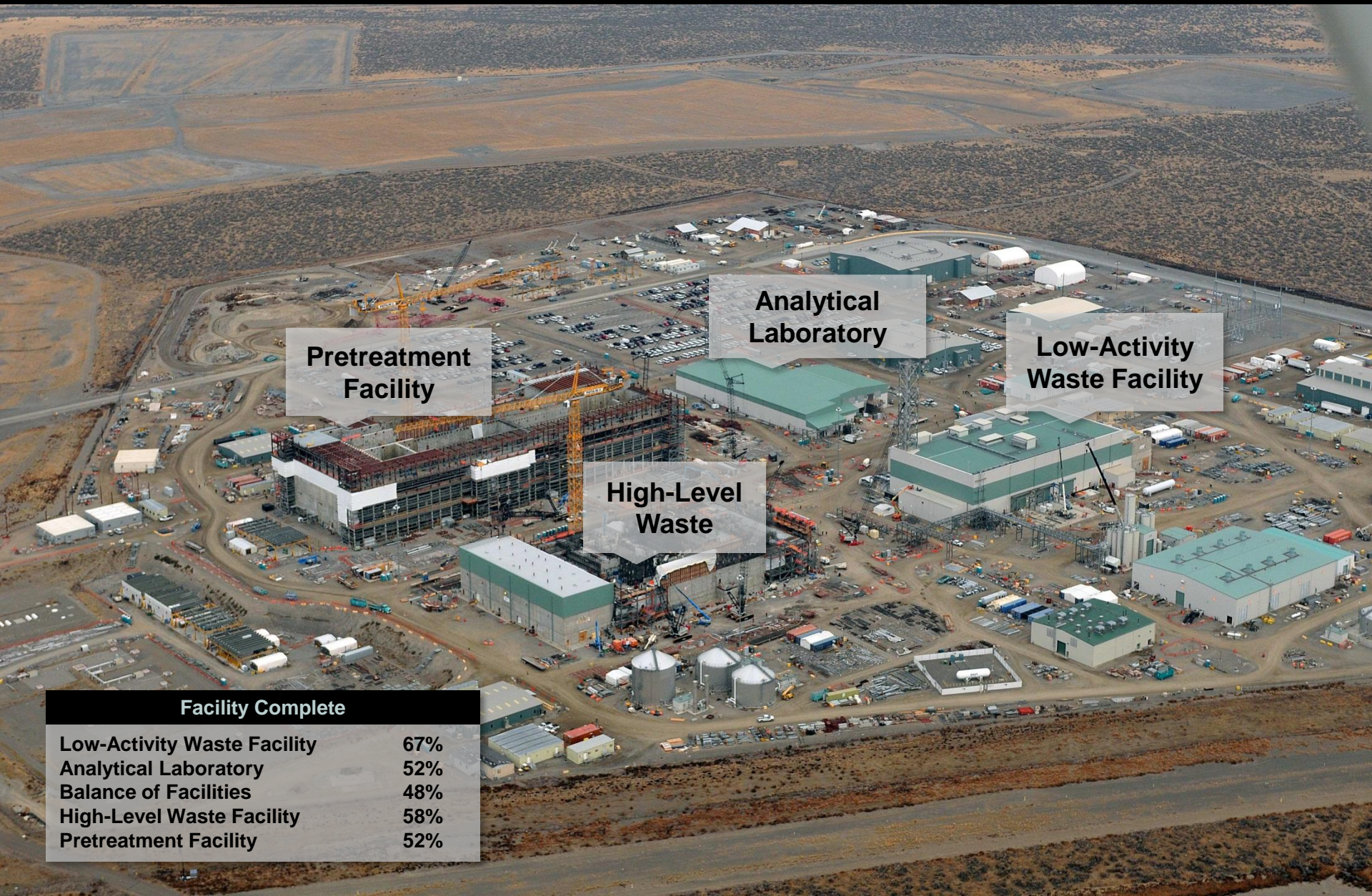
# Tank Farms Work Scope

- Supplemental Treatment





# Waste Treatment Plant is 64% Complete



**Pretreatment  
Facility**

**Analytical  
Laboratory**

**Low-Activity  
Waste Facility**

**High-Level  
Waste**

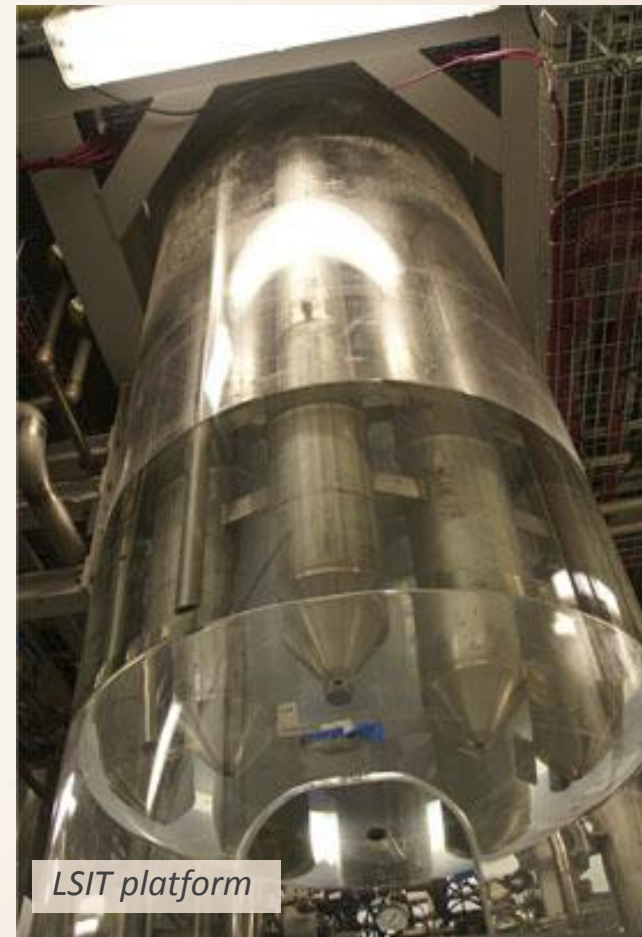
## **Facility Complete**

<b>Low-Activity Waste Facility</b>	<b>67%</b>
<b>Analytical Laboratory</b>	<b>52%</b>
<b>Balance of Facilities</b>	<b>48%</b>
<b>High-Level Waste Facility</b>	<b>58%</b>
<b>Pretreatment Facility</b>	<b>52%</b>



# WTP Work Scope

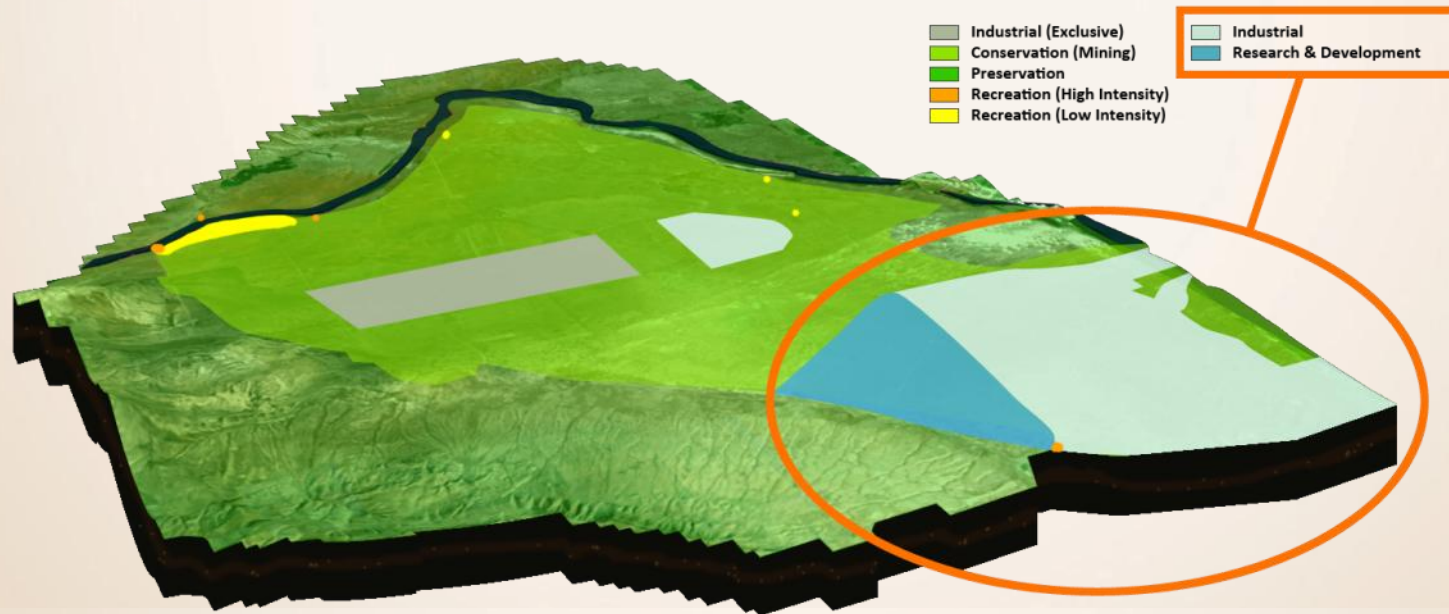
- Large Scaled Integrated Testing (LSIT)
- Complete Low Activity Waste Facility (LAW), Analytical Laboratory (LBL), and Balance of Facilities (BOF)





# Future Use of the Hanford Site

- A natural progression of cleanup is making the land available for beneficial use
- DOE has a land use management plan that lays out the future land use (Comprehensive Land Use Plan) – Environmental Impact Statement and Corresponding Record of Decision



# Find Out More

**Go to**  
[www.hanford.gov](http://www.hanford.gov)  
**to learn about**

- The latest news on Hanford cleanup
- Hanford newsletters
- Contractors' small business opportunities
- Hanford social media sites
- Public events

